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10/526,749

11/14/2005

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EXAMINER

LIN, SHEW FEN

ART UNIT

PAPER NUMBER

2166

MAIL DATE

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12/23/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/526,749 | <b>Applicant(s)</b><br>FISCHER ET AL. |  |
|                              | <b>Examiner</b><br>SHEW-FEN LIN      | <b>Art Unit</b><br>2166               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15 and 17-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 17-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/2/08</u> .   | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

- a. This action is taken in response to Request for Continued Examination filed on 10/2/2008.
- b. Claims 1-13, 15, and 17-46 are pending in this Office Action. Claims 1, 13, 15, and 28 are independent claims.

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 25, 2008 has been entered.

#### ***Information Disclosure Statement***

The Information Disclosure Statement(s) received on October 2, 2008 is in compliance with provisions of 37 CFR 1.97. Accordingly, the Information Disclosure Statement(s) are being considered by the examiner.

#### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection

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is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-13, 15, and 17-46 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4-14, 16-27, and 29-38 of U.S. Patent No. **7,457,933**. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are substantially similar in scope and they use the same limitations, for example, “selecting a data object having an identifier (ID) from the first storage location”, are transparently found in US Patent **7,457,933** with obvious wordings variation.

Claims 1-13, 15, and 17-46 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 and 15-39 of copending Application No. **10/526,747**. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are substantially similar in scope and they use the same limitations, i.e., first and second lock objects in application 10/526,749 are obviously used in lieu of transactional type lock object and permanent type lock object.

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Response to Amendments***

In view of the amendment to claims 8, 23, and 35, the Examiner withdraws the 112 Rejection given in the previous Office Action.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 13, 15, 28, and 34-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites limitation “deleting the ID from the second lock after the ID has been stored in the first lock object”, it is unclear when and how the instruction will be executed because "the ID from the first lock object" has been deleted in the previous step. Claims 13, 15, and 28 recite similar limitations, therefore, are indefinite for the same reason.

Claim 13 recites the limitation “memory means for storing”, “input means for entering”, “storage means for storing” are a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function. It is unclear what "means", such

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hardware/software, is used to storing, entering. Similar claimed limitations are recited in claims 28 and 34-38.

Applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant is required to clarify the record by either:

(a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-13, 15, 18-28, and 30-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohran (US 5,835,953).

**As per claim 1, Ohran disclose a method for moving data objects in a computer system from a first storage location to a second storage location, the method comprising:**

**selecting a data object having an identifier (ID) from the first storage location** (Fig. 7A, 22, items 3b, 4b, 6a, col. 5, lines 49-51, identifies those storage locations that have new data written);

**storing the ID in a second lock object** (Fig. 3, 52, Fig. 7A. 140, col. 11, lines 30-33, snapshot map reads on second lock object);

**determining whether the ID is stored successfully in the second lock object** (snapshot map) **and, upon a successful storage, storing the ID in a first lock object** (backup map), **thereby indicating that the data object is stored at the first storage location** (Fig. 7A, 140, 142, col. 23, lines 27-30, lines 58-60, snapshot map is copied to the backup map. In FIG. 7A, this means that map locations 140 are copied into map locations 142 of backup map 48);

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**storing the data object, at the second storage location** (Fig. 7B, 154, col. 25, lines 9-11, In FIG. 7B, data blocks 152 are received by the backup system and applied to storage locations 124 to achieve storage locations 154. Storage locations 154 are identical to storage locations 138 of the primary system, FIG. 7A);

**deleting the data object, from the first storage location** (col. 18, lines 18-24, clear snapshot storage); **and**

**deleting the ID from the first lock object, thereby indicating that the data object is not stored at the first storage location, after the data object has been deleted from the first storage location** (Fig. 7A, 142, 160, 162, blocks 3b, 4b, and 6a have been moved to the backup system, backup map are updated once data are moved to backup system, where map locations 162 of backup map 48 are changed to be the same as map locations 160 of snapshot map 52, i.e. ID for blocks 3b, 4b, and 6a are deleted )

**deleting the ID from the second lock object after the ID has been stored in the first lock object** (Fig. 4, 70, 72, col. 17, line 56-57, col. 18, lines 8-10, copy the snapshot map into the backup map, After the snapshot map has been preserved so that it can be used as the backup map, the next step is to clear the current snapshot map)

**As per claim 3**, Ohran discloses the method of claim 1, wherein the data object is stored in a file and wherein an assignment of the ID to the file or to a name of the file, is stored in the first lock object (Fig. 3, 20, 48).



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**As per claim 4**, Ohran discloses the method of claim 1, wherein the first lock object is stored on a nonvolatile storage means (col. 8, lines 54-65).

**As per claim 5**, Ohran discloses the method of claim 1, wherein the ID is stored in the second lock object after selecting the data object from the first storage location (Fig. 7A, 136, 140, col. 23, lines 8-18).

**As per claim 6**, Ohran discloses the method of claim 1, wherein the ID is stored in the second lock object before the data object is stored at the second storage location (Fig. 7A, 140).

**As per claim 7**, Ohran discloses the method of claim 1, wherein storing the ID in the first lock object further comprises: storing IDs of other data objects stored in the first lock object before storing the data object at the second storage location (Fig. 7A, 142).

**As per claim 8**, Ohran discloses the method of claim 1, further comprising: checking whether the ID for the data object has been stored in the first lock object and if the ID has been stored, skipping storing the data object at the second storage location (Fig. 7A, 142, items 1, 2, 5 are not selected for transfer).

**As per claim 9**, Ohran discloses the method of claim 1, further comprising: checking whether the data object is contained in the second storage location and if the data object is contained in the second storage location, skipping storing the data object at the second storage

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location (Fig. 9, 194, col. 22, lines 24-30).

**As per claim 10**, Ohran discloses the method of claim 9, wherein the checking is performed by querying the first lock object (Fig. 7A, 142, col. 21, lines 56-60).

**As per claim 11**, Ohran discloses the method of claim 1, further comprising: checking whether the data object has been stored in the second storage location, and if the data object has not been stored, skipping deleting the data object from the first storage location and skipping deleting the ID from the first lock object (Fig. 7B, 26, 154, col. 27, lines 4-20, col. 28, lines 53-57, after a crash, then difference identification block 58 can store the results of the compare in snapshot map 52 or backup map 48).

**As per claim 12**, Ohran discloses the method of claim 1, for use in an enterprise resource planning software (col. 12, lines 46-51).

**As per claim 13**, is directed to a system claim carrying instructions for performing the method of claim 1 and is rejected along the same rationale.

**As per claims 15, 18-26**, are directed to a computer readable medium carrying instructions for performing the methods of claims 1, 3-11 respectively and therefore rejected along the same rationale.

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**As per claim 27**, Ohran discloses the computer readable storage medium of claim 15, wherein the computer readable medium is provided as part of a computer program product (col. 7, lines 49-65).

**As per claims 28, 30-38**, are directed to system claims carrying instructions for performing the methods of claims 1, 3-11 respectively and therefore rejected along the same rationale.

**As per claim 39**, Ohran discloses the method of claim 1, wherein storing the ID in the second lock object indicating that an action is being performed on the data object (Fig. 7A, 22, items 3b, 4b, 6a, col. 5, lines 49-51, identifies those storage locations that have new data written).

**As per claim 40**, Ohran discloses the method of claim 39, wherein deleting the ID in the second lock object indicating that the action is not being performed on the data object (Fig. 7A, 140, items 1, 2, 5 not shaded for old data, i.e. no action is performed ).

**As to claims 41-42**, are directed to a computer system claim carrying instructions for performing the method of claims 39-40 and therefore rejected along the same rationale.

**As to claims 43-44**, are directed to a computer readable medium carrying instructions for performing the method of claims 39-40 and therefore rejected along the same rationale.

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**As to claims 45-46**, are directed to a computer system claim carrying instructions for performing the method of claims 39-40 and therefore rejected along the same rationale.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 17, and 29 are rejected under 35 U.S.C. 103(a) being unpatentable over Ohran in view of Cabrera et al. (US 6,269,382, hereinafter Cabrera).

**As per claim 2**, Ohran does not explicitly disclose wherein the data object comprises one or more fields of one or more tables, and wherein the ID comprises one or more key fields of the one or more tables.

Cabrera discloses wherein the data object comprises one or more fields of one or more tables, and wherein the ID comprises one or more key fields of the one or more tables (Figs. 4, 10, col. 20-15, in the form of an index into a data table, such as remote data table 92 of FIG. 4 or any other information that allows the migration state to be determined).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because Cabrera's teaching would have allowed Ohran's to backup database table based on the key/index.

**As per claim 17**, is directed to a system claim carrying instructions for performing the method of claim 2 and is rejected along the same rationale.

**As to claim 29**, is directed to a computer system claim carrying instructions for performing the method of claim 2 and therefore rejected along the same rationale.

***Response to Amendment and Remarks***

Applicant's arguments have been fully and carefully considered but are moot in view of the new ground(s) of rejection. Refer to the corresponding sections of the claim analysis for details.

***Related Prior Arts***

The following list of prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Pritchard; Jeff et al., US 5822773 A, “Method and system for accelerating the copying of repetitively copied computer data”.
- Reed; Michael L. et al., US 7251661 B1, “Movable objects in a database”

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shew-Fen Lin whose telephone number is 571-272-2672. The examiner can normally be reached on 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shew-Fen Lin /S. L./  
Examiner, Art Unit 2166  
December 18, 2008

/Hosain T Alam/  
Supervisory Patent Examiner, Art Unit 2166